

RSM2005

Regional Simulation Model Peer Review

RSM Documentation

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Topics to Cover

- Web access to RSM
- “Required Reading” documents and additional materials available
- Proposed document set and update plan
- Upcoming peer reviews
- Response to comments on PR Goal 5

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Web access to RSM

- Special site through Jacobs Engineering for Peer Review Part I
 - http://gwmftp.jacobs.com/Peer_Review/web_page/peer_review_sfwmd.htm
- SFWMD RSM Project site *(coming soon on this page)*
 - <http://www.sfwmd.gov/site/index.php?id=45>
- Special sites for additional Peer Reviews in the future
 - *TBD*

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Part I Peer Review “Required Reading”

- RSM Theory Manual
 - Introduction
 - HSE Theory
 - MSE Theory
- 3 published journal articles (intro, analytical tests)
- 1 unpublished article (validation)
- 2 white papers (HPM, MSE details)
- SFRSM Fact Sheet (regional implementation)

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Documents used in Part I Peer Review Additional Materials

- RSM v.2.2.9 code
 - Auto-generated documentation
 - Code maturity report
 - XML structure information
- HSE User Manual
- MSE User Manual (Controllers, Supervisors)
- 3 published papers (subregional implementation, analytical tests)

Available on
the Peer
Review web
site

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***Documents used in Part I Peer Review
Additional Materials cont.***

- RSM Bibliography
- RSM Benchmark Guide
- SFRSM Client Goals
- Historical documents
 - 1998 SFWMM Peer Review Report
 - 2003 SFWMD Strategic Modeling Plan
- Modeling Peer Review Protocols

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Proposed RSM Document Set

- RSM Fact Sheet (*new*)
- RSM Theory Manual (*revise*)
- HSE User Manual (*update to current version*)
- MSE User Manual (*add Assessors, new features*)
- RSM Benchmark Guide and Tests (*expand*)
- RSM Tutorial/Training (*new*)
- RSM XML Primer (*handbook for GUI use*)
- RSM Peer Review Report
- RSM Bibliography (*revise*)

Bringing a technical editor on board beginning 10/1/05 to assist in document revision and assembly

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Proposed Document Set – RSM Implementations

- SFRSM Fact Sheet (revise)
- SFRSM Calibration Results
- SFRSM Calibration Peer Review Report
- NSRSM Validation Results
- NSRSM Validation Peer Review Report

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Proposed Document Set – RSM Test Beds

- Southwest Florida
 - Loxahatchee Watershed
 - Southern Everglades Model
 - Kissimmee Basin
 - South Miami-Dade
 - Water Conservation Area 1
 - Everglades National Park
 - L8 Basin
 - Rapid Action Development
 - C-15 Basin
- ☐ Purpose of test bed
 - ☐ Extent and functions tested
 - ☐ Defined scenarios
 - ☐ Scenario results
 - ☐ XML input files
 - ☐ Appropriate output

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Proposed RSM Documentation Update Plan

Milestone	Dates
Revise RSM Theory Manual	10/1/05 – 11/15/05
Revise HSE User Manual	10/1/05 – 11/15/05
Assemble SFRSM Calibration Report	10/1/05 – 1/31/06
Assemble and Revise NSRSM Validation Report	8/1/05 – 12/31/05
Assemble RSM Tutorial/Training , Revise RSM Benchmark Guide , Revise XML Primer	1/1/06 – 4/30/06
Revise SFRSM Calibration Report	5/1/06 – 5/31/06

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Upcoming Peer Reviews

- **Part II NSRSM Validation**
 - (8/29/05 to 11/11/05)
- **Part III SFRSM Calibration**
 - (2/3/06 to 4/28/06)
- **Part IV SFWMM to SFRSM Migration Strategy**
 - (TBD - 2006)

Response to Comments

- **Goal 5 of the Peer Review:**
 - Making suggestions on the usefulness of the model documentation, including whether the level of detail is sufficient or more is needed, whether the conceptual framework is clear, etc.
- **Addressing typographical and grammatical inconsistencies**

Goal 5 Suggestions

1. Provide published papers instead of older versions
2. Put HPM white paper C.5 into HSE chapter
3. Put MSE white paper C.6 into MSE chapter
4. Replace blurry figures
5. Add more figures for clarity
6. Add RSM Library listing
7. Enhance description of South Florida physical system
8. LaTeX vs. Word? Documentation standards
9. SFRSM vs. RSM fact sheet
10. Audience for documentation set

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1. Provide published papers instead of older versions

Appendix C contains 3 published papers, one submitted paper, and 2 unpublished white papers

- *We will contact the copyright holders to see if we can use the published papers instead of plain text versions*
- *If not, we will verify that we are using the final version of each published paper*
- *We will add the citations on the first page of each subsection to clarify which ones have been published*

2. Put HPM white paper C.5 into HSE chapter

Section 2.6 of Chapter 2 in the RSM Theory Manual contains 4-5 pages of overview material related to HPMs. The HPM white paper is 43 pages of detail.

- *How much of the white paper should be put in the main body of the Theory Manual?*
- *Should HPMs be discussed in a separate chapter from the HSE theory?*
- *There is additional HPM material in Chapter 5 of the User Manual (40 pages). Is this content appropriate, or should part of the white paper be housed here?*

3. Put MSE white paper C.6 into MSE chapter

The MSE Chapter of the RSM Theory Manual contains 10 pages of overview material. The MSE white paper is 50 pages of detail, and does not contain details on the current development effort.

- *How much of the white paper should be put in the main body of the Theory Manual?*
- *There is additional MSE material in the Controllers and Supervisors User Manuals (128 and 64 pp). The Assessors User Manual has not yet been written. Is this separation of content appropriate, or should part of the white paper be housed here?*

4. Replace blurry figures

We plan to make several cosmetic changes in the RSM Theory Manual.

- *Update blurry figures*
- *Address typographical errors*
- *Reorient sideways figures*
- *Crop figures*
- *Redo reference formatting*
- *Add a cover and graphic explaining the full document set*

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5. Add more figures for clarity

We will work with a technical editor to identify a better set of figures

- *Can you identify additional areas where figures could help to better explain RSM concepts?*
- *Can you identify specific figures that need to be enhanced?*

6. Add RSM Library listing

- *We intend to provide an on-line library of all publications (published and unpublished) on our web site. The link to this library will be provided on the RSM Fact Sheet*
- *Does the library of publications need to be included as an appendix to the RSM Theory Manual? As a listing of citations, or with the entire publications provided?*

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7. Enhance description of South Florida physical system

The RSM is intended to be a generic model that can be implemented in any geographic region. Obviously, the primary features we have developed to date have been ones useful to South Florida regional modeling.

- *We feel that information specific to South Florida belongs in the implementation and application documents, rather than in the RSM Theory Manual*
- *There are features we have added as examples that we are not using in South Florida; how do we identify more clearly that interchangeable objects may be appropriate for different geographical areas?*

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8. LaTeX vs. Word, other Documentation Standards

Parts of our document set have been produced using LaTeX, and parts have been produced using Microsoft Word. We number equations differently, cite references differently, etc.

- *We need to set document standards for the Office of Modeling, and ask that all modelers adhere to those standards*
- *What has been your experience in setting document standards that are adjustable to external publishing requirements as well as internal consistency requirements?*

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9. SFRSM vs. RSM fact sheet

- *We plan to produce an RSM fact sheet, which would list generic model capabilities similar to what you would see with a software product sheet*
- *The SFRSM fact sheet highlights one implementation of the RSM, and will be updated periodically to reflect the current status of the RSM implementation project*

10. Audience for documentation set

Different parts of the documentation set will be useful for different audiences:

- *RSM Fact Sheet*
 - *RSM Theory Manual*
 - *RSM Benchmark Guide and Tests*
 - *RSM Bibliography*
 - *RSM Peer Review Report*
 - *RSM Test Bed Reports*
 - *HSE User Manual*
 - *MSE User Manual*
 - *RSM Tutorial/Training*
 - *RSM XML Primer/GUI Handbook*
 - *RSM Implementation Reports, Peer Reviews*
- Diagram illustrating the audience for the documentation set:
- Background info for everyone
 - RSM Fact Sheet*
 - RSM Theory Manual*
 - RSM Benchmark Guide and Tests*
 - Developers, in-depth review
 - RSM Bibliography*
 - RSM Peer Review Report*
 - RSM Test Bed Reports*
 - Clients
 - RSM Peer Review Report*
 - RSM Test Bed Reports*
 - Model implementers
 - HSE User Manual*
 - MSE User Manual*
 - RSM Tutorial/Training*
 - RSM XML Primer/GUI Handbook*
 - RSM Implementation Reports, Peer Reviews*

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517 Editorial Comments!

- Your editorial comments will be addressed
- New releases of the RSM Theory Manual, HSE User Manual, and MSE User Manual may be posted on the peer review website before this peer review process ends, addressing some of the comments
- Some comments will be addressed when we bring a technical editor on board